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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,074	02/04/2004	Masahiro Hatashita	81710.0265	4525

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EXAMINER

DEWS, BROOKE J

ART UNIT	PAPER NUMBER
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2182

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/772,074	Applicant(s) HATASHITA, MASAHIRO	
	Examiner Brooke J. Dews	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20040204; 20060103; 20060407</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. The term "remote" in claim 4, 6-8, 10, and 14 is a relative term that renders the claim indefinite. The term "remote" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Examiner considers the term "remote" to mean not included inside of a structure or device (i.e. connected via outside means).

Correction/clarification is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

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do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 4, 6-9, and 11 are rejected under 35 U.S.C. 102(b) as being taught by Kiyotaka Ohara (US Patent 5822508), hereafter Ohara.

Regarding claim 4 Ohara disclose an image processing system (**1, Figure 2**) comprising:

a scanner device (**via scanner 30**) that scans an image of an original document (via information sheet) and outputs scanned data; (**Column 1 line 13-18**)

a printer device (**laser printer 20**) that prints received image data onto a recording medium (**paper as is the convention**);

and a remote device (**host computer 10**);

wherein when one of the devices (**10 or 30**) acts as a host terminal and another device (**20 or 30**) acts as a device terminal (**via modes 1, 2, or 3**), each of the devices is connected by an interface (**via connector combinations 11, 15-17, 21, 58, and 59**) that transmits and receives data by collaboration of a host function of the one of the devices (**10 or 30**) and a device function of the another device (**20 or 30**); (**Column 2 line 35-43**)

the remote device (**10**) and the scanner device (**30**) are connected with the remote device acting as the host terminal and the scanner device (**30**) acting as the device terminal (**via DTC circuit**); (**Figure 2**)

and the scanner device (**30**) and the printer device (**20**) are connected (**via connector combinations 59, 16, 15, 17, and 21**) with the scanner device (**30**) acting as the host terminal and the printer device acting as the device terminal. (**Column 2 line 41-43; Figure 2**)

Regarding claim 6 Ohara discloses a scanner device (**scanner 30**), comprising:

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at least two input/output ports (**via connectors 58 and 59**) for an interface to transmit and receive data by collaboration of a host function of one device (**host computer 10 or scanner 30**) and a device function (**printing or scanning**) of another device (**scanner 30 or laser printer 20**) with the one device acting as a host terminal (**via 10**) and the other device acting as a device terminal (**via 30**); (**Figure 2**)

wherein when the scanner device (**30**) acts as the device terminal, a connection can be established with a remote device (**10, relative to the scanner**) acting as the host terminal via one of the input/output ports (**via first connector**); (**Column 2 line 35-43**)

and wherein when the scanner device (**30**) acts as the host terminal, a connection can be established with a printer device (**20**) acting as the device terminal via the other one of the input/output ports (**via second connector**). (**Column 2 line 35-43**)

Claim 7 is rejected for the reason set forth hereinabove for claim 6, and further Ohara discloses the scanner device (**30**) further comprising:

means for determining (**via routine setting process control, Figure 5**) whether to forward data received from the remote device by the device function of the scanner device to the printer device; (**Column 2 line 35-37, Column 8 line 48-53**)

and means for controlling (**via data transfer control circuit 60, DTC**) to forward the data to the printer device (**20**) by the host function of the scanner device (**30**) when the means for determining determines to forward the data. (**abstract, Figure 2**)

Claim 8 is rejected for the reason set forth hereinabove for claim 6, and further discloses the scanner device further comprising:

means for determining whether or not the data received from the remote device by the device function of the scanner device (**20**) is an image scanning instruction or an image retrieving request (**via 1st – 3rd transfer mode changeover processes**);

and means for controlling (**via data transfer control circuit 60, DTC**) to transmit scanned image data by the scanner device to the remote device (**10, relative to the scanner 30**) by the device function of the scanner device (**30**) when the means for determining determines that the received data is the image scanning instruction or the image retrieving request. (**abstract, Figure 2**)

Claim 9 is rejected for the reason set forth hereinabove for claim 6, and further Ohara discloses the scanner device (30) further comprising:

means for detecting an input of a copy start instruction (**via a command data detection process; Figure 6**); (**resulting in Figure 4; Column 9 line 19-30**)

and means for controlling to scan an original document in accordance with the input of the copy start instruction and to transmit obtained scanned data to the printer device by the host function of the scanner device (**via the 3rd transfer mode changeover process, Figure 8**). (**resulting in Figure 4; Column 11 line 9-12**)

Claim 11 is rejected for the reason set forth hereinabove for claim 6, and further Ohara discloses the scanner device further comprising:

means for retrieving status information (**via DTC circuit 60, and second connector; Figure 2**) of the printer device (20) by the host function of the scanner device (30);

means for storing the status information (**via RAM 53**) retrieved by the means for retrieving; (**Column 6 line 2-4**)

means for determining whether or not data received from the remote device (10) by the device function of the scanner device (30) is a status information request (**via 1st – 3rd transfer mode changeover processes**);

and means for controlling (**via data transfer control circuit 60, DTC**) to transmit to the remote device (10, **relative to the scanner 30**) by the device function of the scanner device (30), the status information stored in the means for storing, when the means for determining determines that the received data is the status information request. (**Figure 2**)

3. Claim 1-3, 12, 13, 15-20 are rejected under 35 U.S.C. 102(e) as being taught by Po-Sheng Shih (US Publication 2003/0196011), hereafter Shih.

Regarding claim 1 Shih discloses an image processing system (**Figure 3**) comprising:

a scanner device (**via scanner 304**) that scans an original document and obtains scanned data;

a printer device (**via printer 306**) that prints out image data;

a personal computer (PC) (**computer host 302**);

means for establishing a Universal Serial Bus (USB) connection (**via port 308**) between the PC (**302**) and the scanner device (**304**) with the PC acting as a host terminal and the scanner device acting as a device terminal;

and means for establishing a USB connection (**via port 320**) between the scanner device (**304**) and the printer device (**306**) with the scanner device acting as a host terminal and the printer device acting as a device terminal. (**Paragraph [0019]; Figure 3**)

Claim 2 is rejected for the reason set forth hereinabove for claim 1, and further Shih discloses the image processing system (**Figure 3**) according to wherein when carrying out a PC printing operation, the scanner device receives print data from the PC by a USB device function (**via USB hub 310**) and forwards the print data to the printer device by a USB host function. (**Paragraph [0022]; Figure 3**)

Claim 3 is rejected for the reason set forth hereinabove for claim 1, and further Shih discloses the image processing system (**Figure 3**) wherein when carrying out a copying operation, the scanner device transmits the scanned data (**via instructing printer to print**) to the printer device by a USB host function, and when carrying out a PC scanning operation, the scanner device transmits the scanned data to the PC by a USB device function (**via USB port 308 and USB hub 310; Paragraph [0011]**). (**Paragraph [0023]**)

Regarding claim 12 Shih discloses an image processing method (**via Figure 3**) comprising:

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transmitting print data from a personal computer (PC) (**computer host 302**) to a scanner device (**scanner 304**) using a Universal Serial Bus (USB) host function of the PC and a USB device function of the scanner device (**via USB port 308 and USB hub 310**) when carrying out a PC printing operation;

and transmitting the print data from the scanner device to a printer device using a USB host function of the scanner device and a USB device function of the printer device (**via USB port 320**). (**Figure 3; Paragraph [0019 and 0022]**)

Claim 13 is rejected for the reason set forth hereinabove for claim 12, and further Shih discloses the image processing method (**via Figure 3**) further comprising transmitting the scanned data to the printer device (**printer 306**) by the USB host function of the scanner device (**via USB 320 and USB internal host 318**) when carrying out a copying operation. (**Paragraph [0019]**)

Claim 15 is rejected for the reason set forth hereinabove for claim 12, and further Shih discloses the image processing method (**via Figure 3**) further comprising transmitting (**via USB port 308**) scanned data from the scanner device to the PC by the USB device function of the scanner device (**via USB hub 310**) when carrying out a PC scanning operation.

Regarding claim 16 Shih discloses an image processing system (**Figure 3**) comprising:

a scanner device (**scanner 304**) that scans an original document and obtains scanned data;

a printer device (**printer 306**) that prints out image data;

a personal computer (PC) (**host computer 302**);

a first interface (**USB port 308**) that establishes a Universal Serial Bus (USB) connection between the PC and the scanner device with the PC acting as a host terminal and the scanner device acting as a device terminal (**via USB hub 310**); (**Figure 3, Paragraph [0011]**)

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and a second interface (**USB port 320**) that establishes a USB connection between the scanner device and the printer device with the scanner device acting as the host terminal and the printer device acting as the device terminal (**via USB host 318**). (**Figure 3, Paragraph [0011]**)

Claim 17 is rejected for the reason set forth hereinabove for claim 16, and further disclose the image processing system (**Figure 3**) wherein when carrying out a PC printing operation, the scanner device receives print data from the PC by a USB device function (**via USB hub 310**) and forwards the print data to the printer device by a USB host function. (**Paragraph [0022]; Figure 3**)

Claim 18 is rejected for the reason set forth hereinabove for claim 16, and further disclose the image processing system (**Figure 3**) wherein when carrying out a copying operation, the scanner device transmits the scanned data (**via instructing printer to print**) to the printer device by a USB host function, and when carrying out a PC scanning operation, the scanner device transmits the scanned data to the PC by a USB device function (**via USB port 308 and USB hub 310; Paragraph [0011]**). (**Paragraph [0023]**)

Claim 19 is rejected for the reason set forth hereinabove for claim 12, and further Shih discloses the image processing method (**via Figure 3**) further comprising scanning an original document (**via scanner 304**). (**Figure 3**)

Claim 20 is rejected for the reason set forth hereinabove for claim 12, and further Shih discloses the image processing method (**via Figure 3**) further comprising printing out image data (**via printer 306**). (**Figure 3**)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyotaka Ohara (US Patent 5822508), hereafter Ohara in view of Po-Sheng Shih (US Publication 2003/0196011), hereafter Shih.

Claim 5 is rejected for the reason set forth hereinabove where Ohara discloses claim 1, however Ohara does not explicitly disclose the image processing system according to claim 4, wherein the interface is a Universal Serial Bus (USB).

Shih discloses wherein the interface is a Universal Serial Bus (USB).

Shih and Ohara are analogous art because they are from the same field of endeavor being recording, communication, or information retrieval equipment (i.e. PC, scanner, and printer interconnection).

It would have been obvious to one having ordinary skill in the art at the time of invention to combine Shih's with Ohara's the motivation to combine being to transfer data between the computer host and the peripheral devices by the USB at a much faster rate. As a result, the USB is a popular type of interface fitted to most PCs available. (Paragraph [0005] of Shih)

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyotaka Ohara (US Patent 5822508), hereafter Ohara in view of Michael Chen (US Patent 6992799), here after Chen.

Claim 10 is rejected for the reason set forth hereinabove for claim 9, and further Ohara discloses the scanner device further comprising:

means for converting a data format of the scanned data when executing a copying process (**via 3rd transfer mode change-over process control**); (**Figure 8**)

and the means for controlling (**via transfer mode change-over control**) controls to transmit the scanned data under the data format converted by the means for converting when transmitting the scanned data to the printer device. (**Column 11 line 50-55**)

Though Ohara discloses the means for converting, Ohara does not explicitly disclose wherein the means for converting converts the scanned data into a same format as a data format received from the remote device to be forwarded to the printer device (**via 3rd transfer mode, Column 12 line 18-20**); (**Column 12 line 42-46**)

Chen discloses wherein the means for converting (**via the control unit 16**) converts the scanned data into a same format as a data format received from the remote device to be forwarded to the printer device; (**Claim 1 of Chen**)

Chen and Ohara are analogous art because they are from the same field of endeavor being recording, communication, or information retrieval equipment (i.e. PC, scanner, and printer interconnection).

It would have been obvious to one having ordinary skill in the art to combine Chen's scanned data conversion means with Ohara's image data transfer system, the motivation being to provide a scanner which may be operated independently of a computer and to operate scanners in their common manner. (**Column 1 line 12-14, and Column 2 line 31-33**)

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Po-Sheng Shih (US Publication 2003/0196011), hereafter Shih in view of Michael Chen (US Patent 6992799), here after Chen.

Claim 14 is rejected for the reason set forth hereinabove for claim 12, and further Shih discloses the image processing method (**via Figure 3**) further comprising transmitting the scanned data to

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the printer device (**printer 306**) by the USB host function (**via USB host 318**) of the scanner device (**scanner 304**). (**scanner capable of USB host function, Paragraph [0019]**)

However Shih does not explicitly disclose further comprising: converting a data format of the scanned data from the scanner device into a same format as a data format received from a remote device to be forwarded to the printer device when carrying out a copying operation;

Chen discloses converting a data format of the scanned data (**via control unit 16**) from the scanner device (scanner 12) into a same format as a data format received from a remote device (computer 24 relative to the scanner) to be forwarded to the printer device (printer 21) when carrying out a copying operation; (**Claim 1 of Chen**)

Chen and Shih are analogous art because they are from the same field of endeavor being recording, communication, or information retrieval equipment (i.e. PC, scanner, and printer interconnection).

It would have been obvious to one having ordinary skill in the art to combine Chen's scanned data conversion means with Shih's peripheral device serving as a USB host system, the motivation being to provide a scanner which may be operated independently of a computer and to operate scanners in their common manner. (**Column 1 line 12-14, and Column 2 line 31-33**)

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nobuhiro Murai (US Patent 6148358), for USB based separately controlled multi-task computer system, providing USB host functions to multiple devices. Tony Tsai et al. (US Patent 6486977), for scanner with built in microcontroller.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brooke J. Dews whose telephone number is 571-270-1013. The examiner can normally be reached on M-Th 7:30-5:00, alternate F 7:30-4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Donald Sparks', with a large, stylized initial 'D'.

DONALD SPARKS
SUPERVISORY PATENT EXAMINER